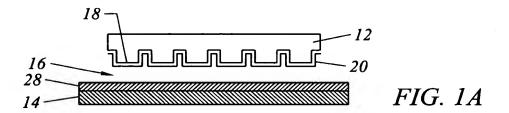
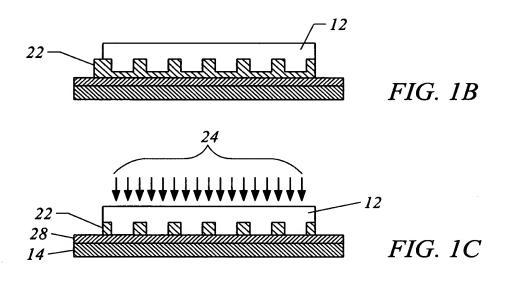


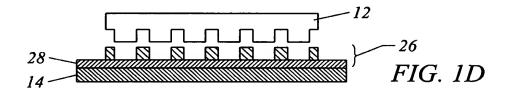
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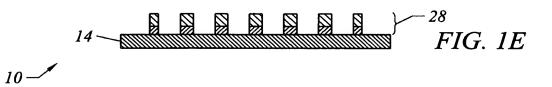
REPLACEMENT DRAWING

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REPLACEMENT DRAWING

Course Orient Template and Substrate (done periodically) 34 Control Spacing between Template and Substrate to Create Uniform Gap (may be required for every die) - 36 Dispense Liquid in Gap (either prior to or after creating uniform gap) 38 Close Gap and Cure Liquid 40 Separate Template from Substrate *30* — Etch to Remove Residual UV 42 cured material formed below Template - (Oxygen Etch Transfer Layer if high aspect ratio needed)

FIG. 2

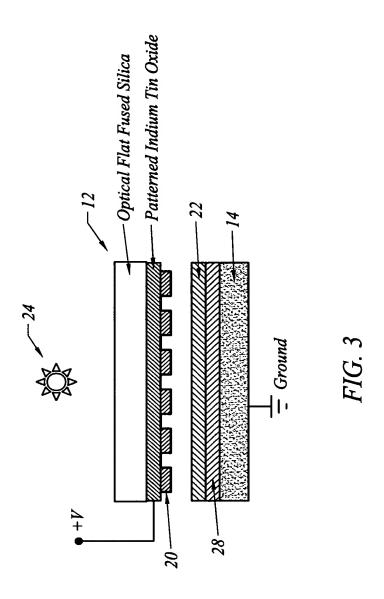


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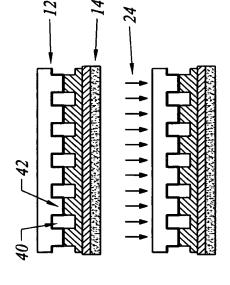
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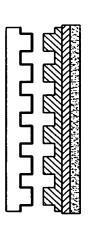


 Apply electric field and maintain uniform gap to

adhere to the template

induce the liquid to

UV cure the liquid



Separate the template

from the substrate

Etch to break-through UV cured liquid, followed by RIE etch transfer into



high-aspect ratio structure

transfer layer to obtain

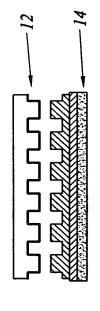
FIG. 4



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REPLACEMENT DRAWING



maintain uniform gap to

induce the liquid to be

Apply electric field and

attracted to the template

without making contact

UV cure the liquid

→ → → → → → → → → → →



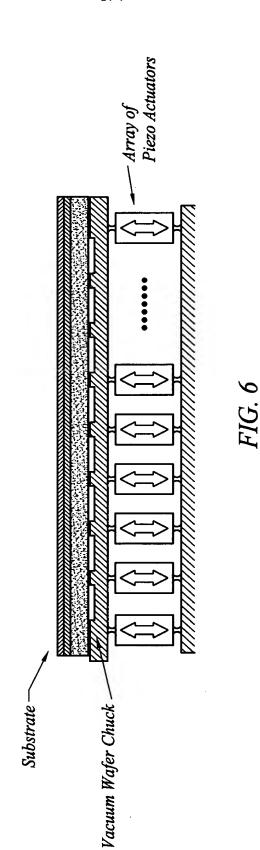
Etch to break-through UV high-aspect ratio structure cured liquid, followed by transfer layer to obtain RIE etch transfer into



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REPLACEMENT DRAWING





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REPLACEMENT DRAWING

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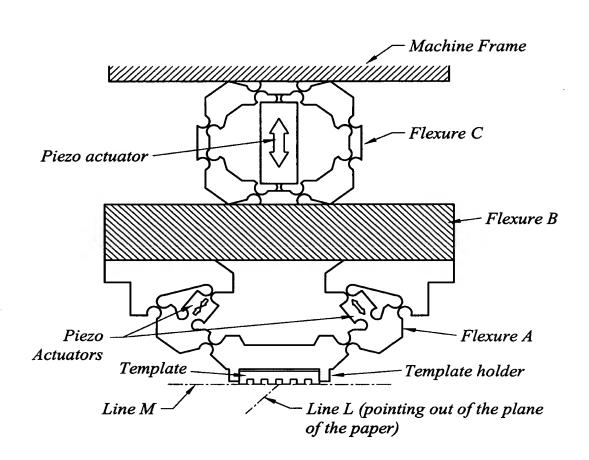


FIG. 7